BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Improvements to roads and drains at Kammagondanahalli Flour Mill surrounding roads in ward no 12, Shettyhalli Sub Division.

JOB NUMBER.:	Sl.No 1	Est. Amount =	190.00	Lakhs

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. (Page No.-143 I.No-19.1 of KPWD S.R 2018-19)								
	CC Drain	Cum							
	Kammagondanahalli Flour Mill								
	1st main Road		2	141.50	1.10	0.90	280.17		
	2nd main Road		2	130.00	1.10	0.90	257.40		
	1st Cross frm 1st Main		2	133.00	1.10	0.90	263.34		
	2nd Cross Road frm 2nd Main		2	129.00	1.10	0.90	255.42		
	4th Cross frm 2nd Main		2	129.00	1.10	0.90	255.42		
	Cross Road-7		1	124.50	1.10	0.90	123.26		
						Total Qty	**1435.01**	**207.60**	**2,97,908.08**
2	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. MORTH Specification No. 2100 (Page No. 222, It No. 27.18 of KPWD S.R 2018-19)								
	Kammagondanahalli Flour Mill	Cum							
	1st main Road		2	141.50	1.10	0.15	46.70		
	2nd main Road		2	130.00	1.10	0.15	42.90		
	1st Cross frm 1st Main		2	133.00	1.10	0.15	43.89		
	2nd Cross Road frm 2nd Main		2	129.00	1.10	0.15	42.57		
	4th Cross frm 2nd Main		2	129.00	1.10	0.15	42.57		
	Cross Road-7		1	124.50	1.10	0.15	20.54		
	CC Road								
	Kammagondanahalli Flour Mill								
	4th Cross Road		1	117.00	4.00	0.15	70.20		
	Cross Road-1		1	37.00	3.00	0.15	16.65		
	Cross Road-2 (3rd Cross)		1	38.00	3.70	0.15	21.09		
	Cross Road-3 (3rd Main)		1	78.00	4.10	0.15	47.97		
						Total Qty	**395.08**	**5421.90**	**21,42,084.25**
3	KSRB 4.9.2 : Providing TMT bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3 (Page No.-18I.No-4.46.2 of KPWD S.R 2018-19)								
	For Drain	Tonne							
	One cubic mt 70kg For Drain		1	35.01			35.01		
						Total Qty	**35.01**	**72326.98**	**25,32,167.57**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
4	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.(Page No.-271 I.No-37.59.2 of KPWD S.R 2018-19)								
	Bottom Slab	Cum							
	Kammagondanahalli Flour Mill								
	1st main Road		2	1	141.50	1.10	0.15	46.70	
	2nd main Road		2	1	130.00	1.10	0.15	42.90	
	1st Cross frm 1st Main		2	1	133.00	1.10	0.15	43.89	
	2nd Cross Road frm 2nd Main		2	1	129.00	1.10	0.15	42.57	
	4th Cross frm 2nd Main		2	1	129.00	1.10	0.15	42.57	
	Cross Road-7		1	1	124.50	1.10	0.15	20.54	
	Side Wall								
	Kammagondanahalli Flour Mill								
	1st main Road		2	2	141.50	0.15	0.60	50.94	
	2nd main Road		2	2	130.00	0.15	0.60	46.80	
	1st Cross frm 1st Main		2	2	133.00	0.15	0.60	47.88	
	2nd Cross Road frm 2nd Main		2	2	129.00	0.15	0.60	46.44	
	4th Cross frm 2nd Main		2	2	129.00	0.15	0.60	46.44	
	Cross Road-7		1	2	124.50	0.15	0.60	22.41	
							Total Qty	**500.08**	**7070.20**	**35,35,665.62**
5	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)								
	New CC Drain	Sqm							
	Kammagondanahalli Flour Mill								
	1st main Road		2		141.50	0.90		254.70	
	2nd main Road		2		130.00	0.90		234.00	
	1st Cross frm 1st Main		2		133.00	0.90		239.40	
	2nd Cross Road frm 2nd Main		2		129.00	0.90		232.20	
	4th Cross frm 2nd Main		2		129.00	0.90		232.20	
	Cross Road-7		1		124.50	0.90		112.05	
							Total Qty	**1304.55**	**2208.00**	**28,80,446.40**
6	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)								
	For Culverts		6		4.70	1.20		33.84	
							Total Qty	**33.84**	**5241.00**	**1,77,355.44**
7	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceablandunserviceable materialsseperately complete as per specifications.MORTH Specification No. 202 (Page No,-140 I.No.-18.47 of KPWD S.R 2018-19).								
	CC Road	Sqm							
	Road Side Cutting for all BC roads								
	4th Cross Road		1		117.00	4.00	0.15	70.20	
	Cross Road-1		1		37.00	3.00	0.15	16.65	
	Cross Road-2 (3rd Cross)		1		38.00	3.70	0.15	21.09	

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Cross Road-3 (3rd Main)		1	78.00	4.10	0.15	47.97		
						Total Qty	155.91	952.94	1,48,572.88
8	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (Page No,-143, I.No.-19.14 of KPWD S.R 2018-19).								
	BC Road	Cum							
	Kammagondanahalli Flour Mill								
	Road Side Cutting for all BC roads		2	670.00	0.60	0.30	241.20		
	Road Cutting		13	4.00	0.50	0.30	7.80		
	CC Road								
	Kammagondanahalli Flour Mill								
	4th Cross Road		1	117.00	4.00	0.30	140.40		
	Cross Road-1		1	37.00	3.00	0.30	33.30		
	Cross Road-2 (3rd Cross)		1	38.00	3.70	0.30	42.18		
	Cross Road-3 (3rd Main)		1	78.00	4.10	0.30	95.94		
						Total Qty	560.82	53.70	30,116.03
9	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, soparation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (Page No,-176, I.No.-22.6.1 of KPWD S.R 2018-19).								
	CC Road	Cum							
	Kammagondanahalli Flour Mill								
	4th Cross Road		1	117.00	4.00	0.15	70.20		
	Cross Road-1		1	37.00	3.00	0.15	16.65		
	Cross Road-2 (3rd Cross)		1	38.00	3.70	0.15	21.09		
	Cross Road-3 (3rd Main)		1	78.00	4.10	0.15	47.97		
	Cross Road-4 (3rd Main)		1	158.00	3.60	0.15	85.32		
	Cross Road-5 (3rd Main)		1	126.00	2.90	0.15	54.81		
	Cross Road-6 (3rd Main)		1	104.00	2.85	0.15	44.46		
	Cross Road-7 (3rd Main)		1	124.00	3.30	0.15	61.38		
						Total Qty	401.88	5210.96	20,94,180.60
10	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, bladeand disc etc., with all lead and lift. (Page No.-176 I.No-22.7 of KPWD S.R 2018-19)								
	CC Road	Sqm							
	Kammagondanahalli Flour Mill								
	4th Cross Road		1	117.00	4.00		468.00		
	Cross Road-1		1	37.00	3.00		111.00		
	Cross Road-2 (3rd Cross)		1	38.00	3.70		140.60		
	Cross Road-3 (3rd Main)		1	78.00	4.10		319.80		
	Cross Road-4 (3rd Main)		1	158.00	3.60		568.80		
	Cross Road-5 (3rd Main)		1	126.00	2.90		365.40		
	Cross Road-6 (3rd Main)		1	104.00	2.85		296.40		
	Cross Road-7 (3rd Main)		1	124.00	3.30		409.20		
						Total Qty	2679.20	72.08	1,93,116.74

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
11	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.Clause 401 of MORTH V Revision...(Page No,-153, I.No.-20.6 of KPWD S.R 2018-19)								
	BC Road								
	Kammagondanahalli Flour Mill								
	Road Side Cutting for all BC roads	Cum	2	670.00	0.60	0.15	120.60		
	Road Cutting		13	4.00	0.50	0.15	3.90		
						Total Qty	**124.50**	**1855.00**	**2,30,947.50**
12	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406(Page No,-155, I.No.-20.18 of KPWD S.R 2018-19).								
	BC Road								
	Kammagondanahalli Flour Mill								
	Road Side Cutting for all BC roads	Cum	2	670.00	0.60	0.20	160.80		
	Road Cutting		13	4.00	0.50	0.20	5.20		
						Total Qty	**166.00**	**2001.28**	**3,32,212.48**
13	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.Clause 502 of MORTH V revision (Page No,-158, I.No.-21.6 of KPWD S.R 2018-19).								
	BC Road								
	Kammagondanahalli Flour Mill								
	Road Side Cutting for all BC roads	Sqm	2	670.00	0.60		804.00		
	Road Cutting		13	4.00	0.50		26.00		
						Total Qty	**830.00**	**29.68**	**24,634.40**
14	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. Clause 501 of MORTH V revision (Page No,-158, I.No.-21.2 of KPWD S.R 2018-19).								
	BC Road								
	Kammagondanahalli Flour Mill								
	1st Main Road	Sqm	1	141.00	4.85		683.85		
	2nd Main Road		1	130.00	4.10		533.00		
	1st Cross frm 1st Main		1	131.00	3.95		517.45		
	2nd Cross Road frm 2nd Main		1	129.00	3.85		496.65		
	4th Cross frm 2nd Main		1	129.00	3.65		470.85		
						Total Qty	**2701.80**	**5.30**	**14,319.54**
15	KSRRB 500-11. Providing and laying bituminous macadam using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.4% VG-30 Bitumenon prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by smooth wheeled, vibratory & tandem rollers to achieve the desired density, but excluding cost of primer / tack coat & including lead, lift and cost of all materials, labour, HOM complete as per specifications. Clause 504 of MORTH V revision(Page No-159 Item no - 21.11.6 of KPWD SR 2018-19)..								
	BC Road								
	Road Edges								

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Kammagondanahalli Flour Mill	Cum							
	1st Main Road		2	141.00	0.60	0.05	8.46		
	2n__lain Road		2	130.00	0.60	0.05	7.80		
	1st Cross frm 1st Main		2	131.00	0.60	0.05	7.86		
	2nd Cross Road frm 2nd Main		2	129.00	0.60	0.05	7.74		
	4th Cross frm 2nd Main		2	129.00	0.60	0.05	7.74		
	Profile Correction								
	Kammagondanahalli Flour Mill								
	1st Main Road		1	141.00	1.20	0.05	8.46		
	2nd Main Road		1	130.00	1.00	0.05	6.50		
	1st Cross frm 1st Main		1	131.00	1.20	0.05	7.86		
	2nd Cross Road frm 2nd Main		1	129.00	1.00	0.05	6.45		
	4th Cross frm 2nd Main		1	129.00	1.00	0.05	6.45		
						Total Qty	**75.32**	**5551.22**	**4,18,117.89**
16	KSRRB M500-10. Providing and applying tack coat using 80/100 grade Sqm bitumen(VGIO) in boiler fitted with spray set distributor at the rate of 0.25 kg per sqm on the existing prepared bituminous surface (primed surface) cleaned with mechanical broom, complete as per specifications. Clause 503 of MORTH V revision (Page No-159 Item no - 21.10 of KPWD SR 2018-19)								
	BC Road	Sqm							
	Kammagondanahalli Flour Mill								
	1st Main Road		1	141.00	4.85		683.85		
	2nd Main Road		1	130.00	4.10		533.00		
	1st Cross frm 1st Main		1	131.00	3.95		517.45		
	2nd Cross Road frm 2nd Main		1	129.00	3.85		496.65		
	4th Cross frm 2nd Main		1	129.00	3.65		470.85		
						Total Qty	**2701.80**	**10.60**	**28,639.08**
17	KSRRB M500-19. Providing and laying bituminous concrete using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level arid alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision(Page No-162 Item no - 21.22.6 of KPWD SR 2018-19)..								
	BC Road	Cum							
	Kammagondanahalli Flour Mill								
	1st Main Road		1	143.00	4.85	0.04	27.74		
	2nd Main Road		1	132.00	4.10	0.04	21.65		
	1st Cross frm 1st Main		1	131.00	3.95	0.04	20.70		
	2nd Cross Road frm 2nd Main		1	129.00	3.85	0.04	19.87		
	4th Cross frm 2nd Main		1	129.00	3.65	0.04	18.83		
						Total Qty	**108.79**	**7911.84**	**8,60,729.07**
18	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No,-182, I.No.-24.15 of KPWD S.R 2018-19).								
	Edge Lane	Sqm							
	Kammagondanahalli Flour Mill								
	1st Main Road		2	143.00	0.15		42.90		
	2nd Main Road		2	132.00	0.15		39.60		
	1st Cross frm 1st Main		2	131.00	0.15		39.30		
	2nd Cross Road frm 2nd Main		2	129.00	0.15		38.70		
	4th Cross frm 2nd Main		2	129.00	0.15		38.70		
						Total Qty	**199.20**	**454.74**	**90,584.21**
								Total Constrution cost	**160,31,797.78**
								GST 12%	**19,23,815.73**
								Design Report,Proof Checking & PMC Amount	**3,20,635.96**
								KRIDL Charges 4.5%	**7,21,430.90**

Improvements to roads and drains at Kammagondanahalli Flour Mill surrounding roads in ward no 12, Shettyhalli Sub Division.

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
								Sub Total	189,98,166.55
								Miscellaneous & Rounding Off	1,833.45
								Grand Total	190,00,000.00

1899680.37
2319.63

Certificate:-

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SKYLINE ENGINEERING CONSULTANCY *Blore-73*

Consultant
For Skyline Engineering Consultancy

Assistant Engineer
Ward 12
BBMP - Bangalore

Assistant Executive Engineer
Shettyhalli Sub-Division
BBMP - Bangalore

Executive Engineer
Dasarahalli
BBMP - Bangalore

ಸಂ. EE/DD/AS/148/18-19 ದಿನಾಂಕ : 12.2.19.
ರೂ. One Crore Ninety Lakh only (Rs. 190.00 Lakh)
ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ.ದಾಸರಹಳ್ಳಿ ವಿಭಾಗ
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು.

ಸಂ. CE/DZ/TS/146/18-19 ದಿನಾಂಕ : 12/02/2019
ರೂ. 190.00 lakhs/- (Rs one Crore Ninety lakhs only)
ಗಳ ಅಂದಾಜು ಪಟ್ಟಿಗೆ ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ.
ತಾಂತ್ರಿಕ ಸಹಾಯಕರು
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ.
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು.